



32- 5042- 02

# User's Information Guide

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## **Energy Recovery Ventilator (ERV)**

**\*ERVR100A9P00A**

**\*ERVR200A9P00A**

**\*ERVR300A9P00A**

\*May be "A" or "T"



# User's Information

## GENERAL INFORMATION

Understand the signal words. **WARNING**, **AND CAUTION**. These words are safety alert words. **WARNING** indicates hazards which **could** result in personal injury or death. **CAUTION** is used to indicate unsafe practices which could result in minor injury or property damage.

### **WARNING**

**Disconnect Power Before Servicing. Failure to follow the electrical servicing instruction may cause Personal Injury or Death.**

### **WARNING**

**Do Not Use This Unit if Any Part Has Been Under Water.**

**Immediately Call A Qualified Service Technician To Inspect The ERV and To Replace Any Part of The Control System Which Has Been Under Water.**

### **CAUTION**

#### **PERSONAL INJURY HAZZARD**

**Failure to follow filter service instructions may cause personal injury. The access door swings down when unit is installed overhead. Carefully hold the access door while unlatching and lowering. The door should be removed prior to performing filter service.**

#### **FILTER SERVICE.**

##### **A Clean Filter Saves Money.**

When the ERV provides fresh outdoor air into your home and exhausts indoor air to the outside, dust and dirt particles build up on the air filters. Excessive accumulation can block airflow, decreasing the ERV's performance and increase energy usage. To maintain top performance be sure to clean or replace the ERV filters according to the instructions in this manual.

Clean filters every three months when the unit is in regular use or as needed to keep them clean.

How to remove and clean your filter:

1. Release cam latches and carefully swing access door open. The access door may be removed for ease of service by sliding the access door off. Use caution when removing door
2. Remove the filter retainer springs. Pull the filters out. See Figure 1.
3. Vacuum filters off with a hose attachment.
4. Re-install filters and retainer spring
5. Re-install cover, and fasten cam latches.

## FILTER SERVICE NOTES

A) The filters should be replaced after they have been cleaned several times. Contact your installing dealer for service and replacement filters. Replacement filter model numbers are as follows:

Model	Filter #
*ERVR100	BAYFLT10A1010A
*ERVR200	BAYFLT20A1020A
*ERVR300	BAYFLT20A1020A

B) Filters may be cut from a sheet or roll of ¾" - 1" firm, spun polyester filter "hog hair" media or material, similar to the existing, factory installed, green/blue filter in the unit.

The size of each filter (2 required per unit) is listed as follows:

*ERVR100	10½" x 10½"
*ERVR200/300	10½" x 21¾"

\* First letter of model number may be an "A" or "T".

C) **Filters must always be used during unit operation** or the heat transfer core will become blocked by particulate matter. The filters supplied in the unit are typically able to keep the heat transfer core clear for many months. Finer filters may be used but must be cleaned more often.

#### **HEAT TRANSFER CORE SERVICE.**

(The Heat Transfer Core may also be referred to as the Energy Exchange Element or Heat Exchanger) ***Vacuum the Face of the Heat Transfer Core Yearly.***

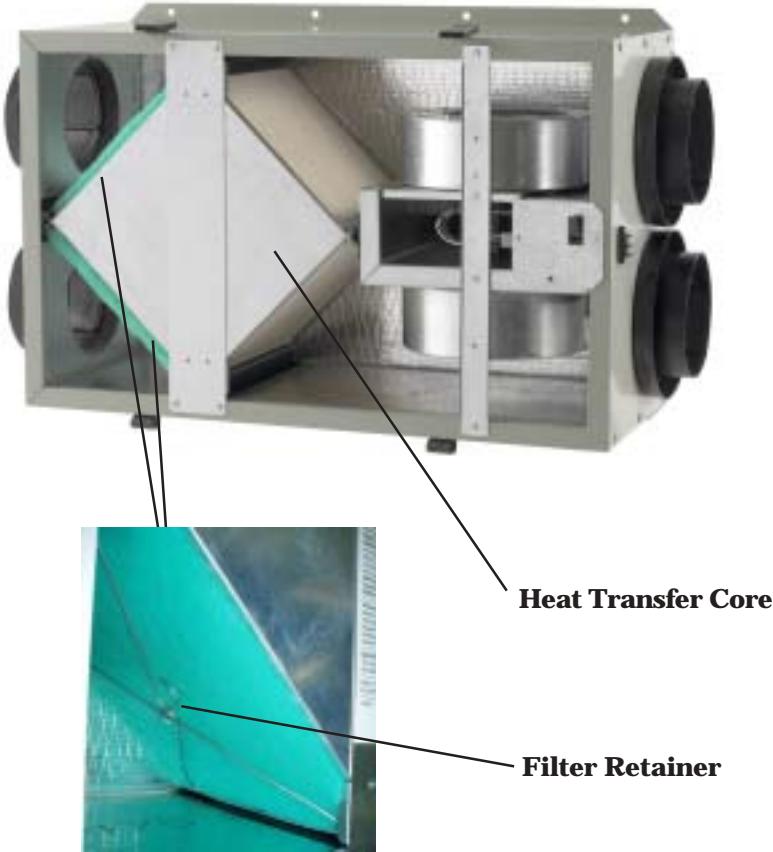
Particulate matter collects only on the entering faces of the heat transfer core. The interior of the heat transfer core stays clean even if the element faces are covered particulates.

#### **TO CLEAN THE HEAT TRANSFER CORE:**

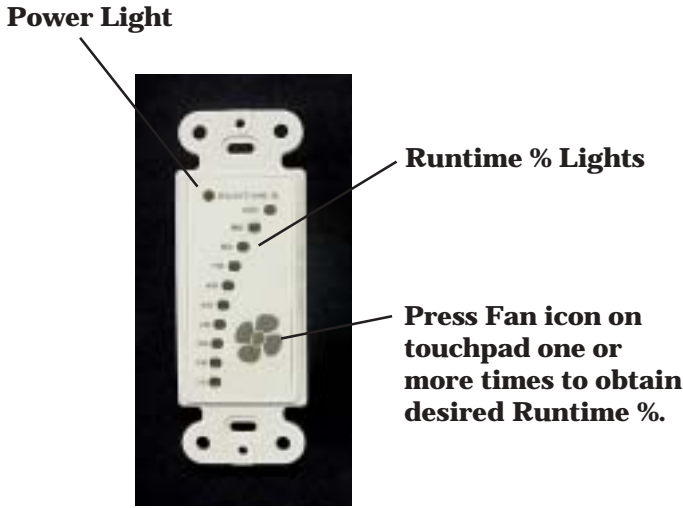
1. Remove filter retainer spring and the filters (see above).
2. Vacuum the exposed faces of the heat transfer core with a soft brush attachment.
3. After servicing the filters, re-install them and the filter retainer spring (see above).
4. Vacuum out dust from the rest of the unit case.

### **CAUTION**

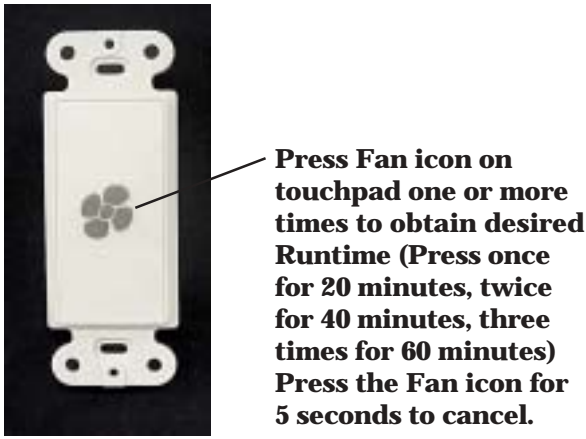
**DO NOT WASH THE HEAT TRANSFER CORE. Always handle the core carefully. Keep it away from water or fire to avoid damaging it. The heat transfer core can be replaced but is expensive.**



**Figure 1**  
**Energy Recovery Ventilator with cover removed**



**Figure 2**  
**Percent Timer (P.T.) Control**



**Figure 3**  
**Optional Push Button Control**

## PERCENT TIMER CONTROL (PT)

The Percent Timer Control automatically energizes and de-energizes the energy recovery ventilator every hour, ensuring ventilation for the home around-the-clock. The PT control has two status lights (See Figure 2). One is the power light located in the upper left hand corner of the control. The other light will be one of the Runtime % lights. The power light is on whenever the PT control is calling for the ERV to run. The Runtime % light is located along the right side of the control. The Runtime % light indicates the amount of time per hour the ERV will operate. Set the control per your local code or ASHRAE Std 62.2 and your ventilator will run once every hour.

**FOR CONSTANT OPERATION:** Press the fan icon until the 100% light is on. The "Runtime %" light turns on. The ERV unit will run continuously.

**FOR MINIMUM VENTILATION REQUIREMENT OPERATION:** Set the control at the percentage that meets local code or ASHRAE 62.2. Press the fan icon until the light for the percent desired is on.

**TO TURN THE ERV OFF:** Press the fan icon until all lights are off. The control is off. The ERV motor is de-energized. (Power is still present inside the unit. Always unplug cord from outlet before servicing!)

**GENERAL SETTINGS:** For systems installed in an area with high humidity. The Percent Timer should be set to deliver the Minimum Ventilation Requirements.

**VACATION SETTINGS:** For systems installed in an area with high humidity. If the A/C system thermostat setting is elevated or set up while on vacation or for extended periods of time (over 2 days), the Percent Timer and ERV should be turned OFF. After returning from vacation or when the system thermostat is lowered to normal daily setting, the Percent Timer and ERV should be reset to the previous runtime %.

**WHEN WINDOWS ARE OPEN:** When windows are open in your home the Percent Timer and ERV should be turned OFF.

### ***NOTE for ERV systems with more than one control:***

Another control may be causing your ventilator to run -even if the runtime % light on this control is off. If you wish to keep your ventilator from running, check that none of your controls are calling for unit operation.

## Installation

1. Install control in a standard 2" x 4" electrical box, with a minimum depth of 1.5", with the two screws provided.
2. Wire Size: 18 gauge, no more than 500 feet. Wiring is non-polar.
3. The two wires from the ERV should be attached to the 'C' and 'R' positions on the terminal block on the back of the PT Control. See Figure 13.

4. Use Lutron Decora™ cover plate to complete the installation (supplied by installer).

## PUSH BUTTON POINT-OF-USE CONTROL (OPTIONAL ACCESSORY)

### For use with all ERV models

#### Operation

The Push Button (PB) Point-of-use Control lets you manually turn on your energy recovery ventilator for a short period of operation – for example, when you are using a bathroom. The PB Control must be connected to a PT control to operate.

#### 20-40-60 minute ventilation control:

Press the fan icon and your ventilator will run for 20 minutes (See Figure 3). Press again and the unit will run 40 minutes. A third press provides for 60 minutes of operation. Percent Timer Control does not need to be on for the PB Control to operate the ERV unit.

You can cancel a cycle at anytime. Just press the fan icon and hold for about five seconds.

You can start another cycle by pressing the fan icon.

### **NOTE for ERV systems with more than one control:**

Another control other than the push button may be causing your ventilator to run. If you wish to keep your ventilator from running, check that none of your controls are calling for unit operation.

## Installation

4. Install control in a standard 2" x 4" electrical box, with a minimum depth of 1.5", with the two screws provided.
5. Wire Size: 18 gauge, no more than 500 feet. Wiring is non-polar.
6. Two wires from the PB Control should be attached to the 'PB' positions on the terminal block on the back of the Percent Timer Control.
7. For two PB controls, one wire from each can be twisted together and inserted into a single position on the terminal block on the Percent Timer Control. The wires must be a 18 gage solid wire. If more than two PB controls are attached or 18 gage stranded wire is used then pigtailed must be inserted into the 'PB' positions on the Percent Timer Control and the leads attached to the pigtailed with wire nuts.
8. Use Lutron Decora™ cover plate to complete installation.

## Limited Warranty Energy Recovery Ventilator (ERV) ERVR100, 200, 300 (Parts Only)

### Models for Residential Use\*

This limited warranty is extended by American Standard Inc., to the original purchaser and to any succeeding owner of the real property to which the ERV is originally affixed, and applies to products purchased and retained for use within the U.S.A. and Canada only.

If any internal functional part of your ERV fails because of a manufacturing defect within five years from the date of the original purchase, Warrantor will furnish without charge the required replacement part. Any local transportation, related service labor, diagnosis calls, and related items are not included.

If compatible ERV controls are incorporated in the HVAC system and are installed at the same time as your ERV, then if any Warrantor furnished internal functional part of the ERV controls fail because of a manufacturing defect within five years from the date of original purchase, Warrantor will furnish the required replacement part. Any local transportation, related service labor, diagnosis calls, refrigerant and related items are not included. THIS LIMITED WARRANTY IS IN LIEU OF ANY EXPRESS WRITTEN LIMITED WARRANTY ACCOMPANYING ANY OF THE ABOVE INDOOR PRODUCTS.

If the heat transfer core should become defective because of a manufacturing defect within ten years from the date of original purchase, Warrantor will furnish without charge the required replacement heat transfer core. Any local transportation, related service labor, diagnosis calls and related items are not included.

This limited warranty does not cover failure of your ERV if it is damaged while in your possession, damage caused by acts of God, damage from unreasonable use of the ERV and/or damage from **failure to properly maintain** the ERV as set forth in the Users Information Guide.

**THE LIMITED WARRANTY AND LIABILITY SET FORTH HEREIN ARE IN LIEU OF ALL OTHER WARRANTIES AND LIABILITIES, WHETHER IN CONTRACT OR IN NEGLIGENCE, EXPRESS OR IMPLIED, IN LAW OR IN FACT, INCLUDING BUT NOT SPECIFICALLY LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR USE, AND IN NO EVENT SHALL WARRANTOR BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES.**

Some states do not allow limitations on how long an implied limited warranty lasts or do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This limited warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Parts will be provided by our factory organization through an authorized service organization in your area listed in the yellow pages. If you wish further help or information concerning this limited warranty, contact:

American Standard Inc.  
6200 Troup Highway  
Tyler, TX 75707  
Attention: Manager, Field Operations Excellence

**GW-658-0106**

\* This limited warranty is for residential usage of this equipment and not applicable when this equipment is used for a commercial application. A commercial use is any application where the end purchaser uses the product for other than personal, family or household purposes.

# Limited Warranty

## Energy Recovery Ventilator (ERV)

### ERVR100, 200, 300 (Parts Only)

#### Models for Commercial Use\*

This limited warranty is extended by American Standard Inc., to the original purchaser and to any succeeding owner of the real property to which the ERV is originally affixed, and applies to products purchased and retained for use within the U.S.A. and Canada only. There is no warranty against corrosion, erosion or deterioration.

If any internal functional part of your ERV fails because of a manufacturing defect within one year from the date of the original purchase, Warrantor will furnish without charge the required replacement part. Any local transportation, related service labor, diagnosis calls and related items are not included.

If compatible ERV controls are incorporated in the HVAC system and are installed at the same time as your ERV, then if any Warrantor furnished internal functional part of the ERV controls fail because of a manufacturing defect within one year from the date of original purchase, Warrantor will furnish the required replacement part. Any local transportation, related service labor, diagnosis calls, refrigerant and related items are not included. THIS LIMITED WARRANTY IS IN LIEU OF ANY EXPRESS WRITTEN LIMITED WARRANTY ACCOMPANYING ANY OF THE ABOVE INDOOR PRODUCTS.

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Some states do not allow limitations on how long an implied limited warranty lasts or do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This limited warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

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**American Standard Inc.**  
6200 Troup Highway  
Tyler, TX 75707

For more information contact  
your local dealer (distributor)

Since the manufacturer has a policy of continuous product and product data improvement, it reserves the right to change design and specifications without notice.